

## A NEW MODE

OF

# TREATING PUERPERAL FEVER.

BY DR CHARLES BELL.

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IT is not my intention to enter on a lengthened dissertation on puerperal fever, as it is fully described in many of our works on midwifery, and my object is merely to bring more prominently under the notice of the Society a mode of treatment which I have been induced to recommend, from its successful results in diseases of a similar nature, as well as in the few cases of this disease in which I have had the opportunity of employing it. For, although I have been connected with the Royal Maternity Hospital for many years, only one case of puerperal fever has occurred during the period I was doing duty. I ascribe this immunity from the disease, to the liberal use of the permanganate of potash, both as a lotion and in the form of liniment, in making examination per vaginam, and to a strict attention to ventilation, and to the avoidance of overcrowding the wards. I feel satisfied that there is greater risk to the parturient woman, from a close contaminated atmosphere, than from the free admission of pure air into the lying-in chamber. I have therefore always ordered one of the windows of the wards to be kept partially open.

The more we study puerperal fever, the correctness of the opinion entertained by Sennertus and Riverius will appear the more obvious, namely, that it is a blood disease arising from the absorption of a virulent poison into the system, which is communicable from one individual to another, and may also be inhaled from the atmosphere. This circumstance was fully illustrated by M. Peu, in his description of the epidemic fever which appeared in the Hôtel Dieu in 1664, when a great number of women died, in consequence of

the number of wounded persons who were accommodated under the lying-in ward. This was the first appearance of the disease in the epidemic form, and it was peculiar in its character, as it was preceded by haemorrhage, and was attended by numerous internal abscesses. It formed a striking contrast to the next epidemic, which occurred in Paris in 1746, and proved fatal to many women both in the hospital and to those who were delivered in their own houses. According to Montonu, it "commenced with diarrhoea; the uterus became dry, hard, and painful; it was swollen, and the lochia had not their ordinary course; the women experienced pain in the bowels, particularly in the situation of the broad ligaments; the abdomen was tense; and these symptoms were sometimes joined with pain in the head and cough. On the third and fourth day after delivery, the mammae became flaccid. On opening the bodies, matter like curdled milk was found on the surface of the intestines; a milky serous fluid in the hypogastrium; a similar fluid was found in the thorax of certain women; and when the lungs were divided they discharged a milky putrid lymph. The stomach, intestines, and uterus, appear to have been inflamed.

It may not be uninteresting to refer to the character of the disease as it appeared in the epidemic which occurred in Paris and Lyons in 1750, as illustrating still further the complications which attend the disease, and prove still more its zymotic character. Poteau informs us that the uterus was found enlarged, and its internal surface soft and black, and its parietes were livid and gangrenous.

While puerperal fever may be complicated in the manner just described, it is not a necessary consequence, as, like smallpox in its most fatal form, it runs its course so rapidly in some cases that there is no time to form any local lesion which can be ascertained during life, or discovered after death. Dr Rigby informs us, that in some of the cases which came under his notice in the general lying-in hospital, there was "neither time nor power sufficient to produce either symptom or trace of inflammation, the powers of life having from the commencement sunk under the deadly influence of the disease." He therefore adds, "that of all the diseases to which the lying-in woman is exposed, puerperal fever is the most to be dreaded, and that there is none in which the accoucheur is frequently more helpless."

In a disease of such virulence, it is of the utmost importance that a remedy should be discovered to moderate its severity. I am convinced of its similarity to erysipelas—a circumstance which has been proved, not only by its appearing epidemically along with that disease, as happened in Barnsley in 1808, and in Leeds in 1809, but there are instances on record,<sup>1</sup> in which puerperal fever has been induced by those attending patients suffering from erysipelas, and then attending women in their confinement; and there

<sup>1</sup> Ramsbotham, p. 596.

have also been instances of puerperal-fever patients producing erysipelas in their nurses. I have also observed both diseases existing at the same time in the same individual. I was therefore induced, many years ago, to suggest that the treatment which I had found so beneficial in erysipelas should be adopted in puerperal fever. I had no opportunity, however, of putting it in practice until a comparatively recent period, when I employed it in the only case which came under my care in the Maternity Hospital, and although the case was very severe, and the patient's life was despaired of, it proved successful, and the woman left the hospital in health. I have already reported this case to the Society. The success which attended this case led me to adopt it in another case which I was requested to see by Professor Simpson, which was considered hopeless, yet the patient left the hospital in perfect health. Through the kindness of Dr Young, I had an opportunity of employing the treatment in a patient of his, whom I attended in a premature labour. She was seized with puerperal fever soon after her confinement, and I despaired of her recovery, but she was ultimately restored to health, I understand, for I ceased my attendance before she was quite recovered.

The treatment of puerperal fever in former days was of the heroic kind, as the following case illustrates, and I relate it in order to show the contrast to what I recommend.

*22d Nov.*—Mrs S., aged thirty-four, a thin delicate-looking woman, with a sallow complexion, was delivered of her third child, a girl, after natural and apparently easy labour. The placenta was expelled immediately after the child. The womb continued large, although there was no haemorrhage.

*24th Nov.*—Apparently going on satisfactorily, and she felt so well that she sat up in bed for some time in the morning, but at 1 P.M. she was seized with rigors, followed by a glow of heat, soon after which violent pain in the region of the uterus, which was still large.

A linseed poultice was applied to the abdomen, and she had the following powder: calomel gr.ii., and antimonial powder gr.v., in gruel.

*8 P.M.*—Bowels moved twice; pain in the womb so severe that she could not bear the slightest pressure; pulse 120, full and strong; tongue white and flabby. She was bled to  $\frac{3}{4}$ xvi., when she became sick, and vomited some undigested food. The stomach was so irritable that she got no medicine.

*25th Nov., 8 A.M.*—Has had some sleep, but is still in great pain in the lower part of the abdomen; pulse 120, weak. To have two dozen of leeches, and then the following powder:—Rx Hydrarg. cum creta, gr.iv.; pul. Doveri, gr.x.

*2 P.M.*—Dr Rigby ordered the womb to be washed out with tepid water, and that she should have six grains of calomel and four of antimonial powder.

*11 P.M.*—Has had several hours' sleep, and feels easier, although

there is still much tenderness on pressure ; pulse 120, full. To have the white saline mixture in the morning, until the bowels are moved.

26th Nov.—Has perspired freely during the night. Bowels moved several times. Stools dark-coloured at first, but they became more natural. The uterus more painful and swollen, and there is slight tympanitis. Great thirst ; tongue furred. Pulse 128, sharp and resisting.

Eighteen leeches were applied to the abdomen, and she had eight grains of calomel and four of antimonial powder. A linseed poultice to be continued after the leeches come off.

9 P.M.—Feels easier, and there is less tenderness on pressure. Tongue cleaning round the edge ; pulse 132, weak. Bowels moved several times. The womb to be again washed out with tepid water.

27th Nov., 8 A.M.—Complaining of general soreness, but has no pain on pressure, although the womb is large and hard. Bowels moved several times ; tongue cleaner. Expression of countenance very anxious. To have the following draught :—Rx Mist. cretæ, 3ss.; tinct. catechu, 3j. M. Ft. haustus.

This draught to be repeated after every stool.

2.30 P.M.—Dr Rigby ordered her to have a soda powder.

4 P.M.—Dr Lee saw her, and ordered her to have three grains of gray powder, with four of Dover's powder, every four hours, in consequence of her having vomited a quantity of bilious matter.

8 P.M.—Bowels moved twice, and she has again vomited a quantity of bilious matter, and she feels much exhausted ; eyes sunk ; countenance extremely anxious ; tongue loaded with white fur ; pulse 130, weak. To have two grains of opium.

10.30 P.M.—No return of vomiting and purging, and feels easier than she has done since her illness. The uterus seems less, and is free from pain ; but the abdomen more tympanitic. It was rubbed with lard and a poultice applied, with great comfort. The first point of her middle finger much swollen and inflamed, and the pain extends to the shoulder. To have laudanum applied.

28th Nov., morning visit.—States that she is quite comfortable, although very weak, and has much pain in the right arm, which is inflamed from the wrist to the elbow on the outside, and there are several dark spots on it.

To have a lotion, composed of equal parts of camphorated spirit and ammonia, applied to it, and to take one of the following pills every hour :—Rx Camphor, ext. hyoscyam.,  $\text{a}\bar{a}$  gr. viij. ; opii, gr. iii. M. et divide in pil. iv. To have sago and wine.

She sank rapidly, and died at 2 P.M.

In place of such active treatment as was adopted in the above case, I recommend small doses of calomel and James's powder in proportion of a twelfth of a grain each, along with a grain of white sugar, carefully compounded and given regularly every two hours until

the bowels are freely moved; and thirty drops of the muriated tincture of iron every three hours. The vagina to be washed out several times a day with Condy's red fluid and tepid water, and a linseed poultice applied to the abdomen. If this treatment is regularly and fully carried out, and not in the *timid, partial* way which many practitioners do in erysipelas, and then undervalue the treatment, I feel certain it will give the best chance of cure to the patients.

*Dr James Young* believed that great benefit was obtained from using calomel in the manner described by Dr Bell; he had lately suffered from an attack of erysipelas, and been treated with the tincture of the muriate of iron and calomel, in doses of a twelfth of a grain, with the best results. He had never seen head symptoms in puerperal fever, and he looked upon diarrhoea as one of the most serious complications you could have in that disease.

*Dr Bell* regarded puerperal fever as a disease *sui generis*, and that there may be complications occurring in it as in any other disease. The tincture of the muriate of iron he believed lowered both the pulse and the temperature. The efficacy of the powder depends greatly on the manner in which it is compounded, and the regularity with which it is given. When these have been properly attended to, he has never found it fail to move the bowels, and to diminish fever; but if they are neglected it is not surprising that it should cause disappointment.

